

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/095310 A1

(51) International Patent Classification⁷: **G06F 17/27**

(21) International Application Number:
PCT/KR2004/000927

(22) International Filing Date: 22 April 2004 (22.04.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0025995 24 April 2003 (24.04.2003) KR

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

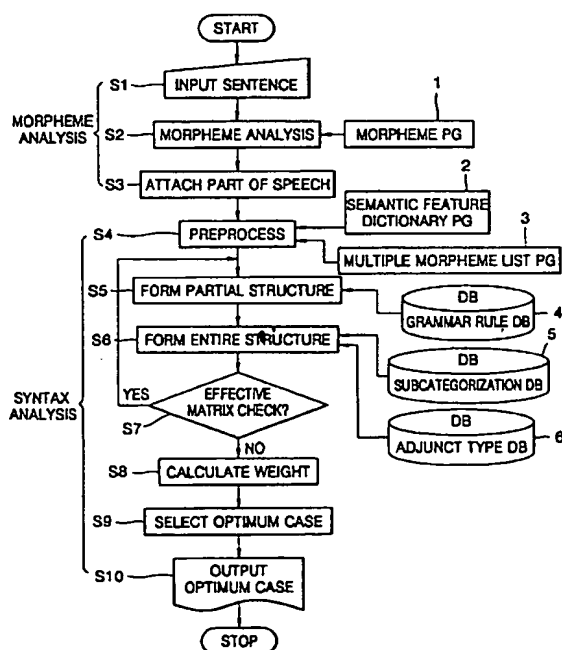
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR SENTENCE STRUCTURE ANALYSIS BASED ON MOBILE CONFIGURATION CONCEPT AND
METHOD FOR NATURAL LANGUAGE SEARCH USING OF IT



(57) Abstract: A method of syntax analysis based on a mobile configuration concept, and a natural language search method using the syntax analysis method, are provided. The syntax analysis method includes morpheme analysis and syntax analysis after establishing a morpheme dictionary program for analyzing morphemes of an input sentence, and a subcategorization database storing the details of subcategories belonging to heads, such as stems of words and word endings, of each component of a sentence such that the syntactic status of an inflective word ending is admitted based on the marker theory which regards both postpositions and endings as syntactic units, and combination relations between words can be grammatically defined as a whole. In the morpheme analysis, if a sentence desired to be analyzed is input, the contents of morphemes are analyzed in units of polymorphemes according to the morpheme dictionary program, and after selecting an analysis case of a morpheme appropriate to the input data among morpheme analysis data by polymorpheme, preprocessing is performed. In the syntax analysis, with the analyzed morphemes, partial structures of a sentence are first established according to grammatical roles stored in a grammar rule database, and then, by using the subcategorization database, the entire structure is established. Then, by calculating the weighted value of each structure, a most appropriate optimum case is determined and output. Accordingly, any scrambled sentence can be easily and quickly analyzed without any sophisticated parsing apparatus. Also, the grammatical relationships between expressions forming a sentence can be ac-

curately captured such that information requested by a user is retrieved in the same manner as a human-being makes a decision, and accurate information can be provided.

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